

**DERWENT-ACC-NO:** 1993-113812

**DERWENT-WEEK:** 199949

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**TITLE:** Silver@ paste for electroconductive thin film - contains organic silver cpd., organic nickel cpd., film forming stabiliser, binder and solvent

**PATENT-ASSIGNEE:** NE CHEMCAT KK[NECHN]

**PRIORITY-DATA:** 1991JP-0240224 (August 28, 1991)

**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 05054716 A	March 5, 1993	N/A	004	H01B 001/22
JP 2965759 B2	October 18, 1999	N/A	004	H01B 001/22

**APPLICATION-DATA:**

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 05054716A	N/A	1991JP-0240224	August 28, 1991
JP 2965759B2	N/A	1991JP-0240224	August 28, 1991
JP 2965759B2	Previous Publ.	JP 5054716	N/A

**INT-CL (IPC):** C09D005/24, H01B001/22 , H05K001/09

**ABSTRACTED-PUB-NO:** JP 05054716A

**BASIC-ABSTRACT:**

Paste contains an organic Ag cpd., an organic Ni cpd., a film forming stabiliser, an organic binder and a solvent.

Pref. content of the organic Ag cpd. is 5-40 wt.% as Ag reduced to total, content of the organic Ni cpd. is 0.1-5 wt.% as Ni reduced to total, the film forming stabiliser is at least one of metal organic cpd. of Si, B, Pb, Bi, V, Mg, Al or Zr.

**USE/ADVANTAGE** - The paste is suitable for up to 5 microns of electric conductive circuit, variation rate of sheet resistance is fairly stable.

In an example a paste was prepd. by mixing 67.6g Ag-neodecanoate (Ag = 38 wt.%), a 4.8gh N-2-ethyl hexanoate (Ni = 17 wt.%), 5g ethylcellulose, 1g Au-balsam sulphide (Au = 25 wt.%), 0.1g Rh-2-ethyl hexanoate (Rh = 15 wt.%), and 21.5 terpeneol. The paste was screen printed on a glazed alumina substrate, sintered for 10 minutes at 800 deg.C. to 1.2 mcrons thick. Sheet

resistance = 82.7 m-ohm/sq.inch-1 micron. A test of the sheet for 3 times repeated heat for 10 minutes at 800 deg.C. showed that change of resistance was -5.6%.

**CHOSEN-DRAWING: Dwg.0/0**

**TITLE-TERMS: SILVER@ PASTE ELECTROCONDUCTING THIN FILM CONTAIN ORGANIC SILVER**

**COMPOUND ORGANIC NICKEL COMPOUND FILM FORMING STABILISED BIND SOLVENT**

**DERWENT-CLASS: E12 G02 L03 U11 V04 X12**

**CPI-CODES: G02-A05B; L03-A01A; L03-H04E4;**

**EPI-CODES: U11-A05A; V04-R02P; X12-D01A;**

**SECONDARY-ACC-NO:**

**CPI Secondary Accession Numbers: C1993-050823**

**Non-CPI Secondary Accession Numbers: N1993-086358**